CHARLES RIVER WATERSHED STUDY

STATUS REPORT

1 July 1967

Prepared by

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AUTHORITY

1. Resolved by the Committee of Public Works of the House of Representatives dated 24 June 1965. Assigned to NED by OCE, by letter of 1 July 1965.

STUDY AND REPORT

- 2. Scope. Plan of development to meet present and future requirements for water supply, flood control, navigation, water quality control, recreation, fish and wildlife and other purposes requiring development of water and related land resources. Plan to meet these needs through 1980 and indicate potentials to meet needs through 2020.
- 3. <u>Coordination</u>. A Coordinating Committee comprised of Federal and State agencies under the Chairmanship of the Division Engineer, New England Division, Corps of Engineers is as follows:

Federal

Benjamin Isgur, Department of Agriculture
Walter M. Newman, Department of Interior
Edwin W. Webber, Department of Commerce
Frank Tetzlaff, Dept. of Health, Education & Welfare
Frank C. Batstone, Dept. of Housing & Urban Development

State

Robert L. Yasi, Dept. of Natural Resources Howard Whitmore, Jr., Metropolitan District Commission

In addition, a Citizen's Advisory Committee of 29 members has been formed to provide information on specific desires of municipalities.

DESCRIPTION OF STUDY AREA

4. Charles River Watershed is located in eastern Massachusetts, bordering on the watersheds of the Mystic, Merrimack, Blackstone, Taunton and Neponset Rivers and includes all or portions of 5 cities and 30 towns. The Watershed is about 307 square miles in area, hour glass in shape with a length of 31 miles and widths of 15, 6 and 15 miles. Elevations vary from 586 feet, msl, along the southwesterly rim of the watershed in Hopkinton to below 10 feet, msl, along the lower $8\frac{1}{2}$ miles of the Charles River.

SCHEDULE AND STATUS

- 5. Hearings and Meetings
 - a. Public Hearings

Waltham, 17 January 1967 Wellesley, 19 January 1967 Franklin, 24 January 1967

- b. Coordinating Committee Meetings
 - 9 December 1966
 - 18 April 1967
 - 26 September 1967 (scheduled)
- c. Citizen's Advisory Committee Meetings
 - 1 May 1967
 - 8 June 1967 September 1967 (scheduled)
- 6. Work was started on the study in January 1966. The principal work items completed or in progress on the Charles River study are as follows:

- a. A center line profile of the Charles River has been prepared and is available. It shows important physical features such as bridges, dams and elevations.
- b. Study maps at 2,000 ft. and 1,000 ft. per inch scales are being prepared from USGS and other sources to cover the Charles River.
- c. Some 93 bridges cross the Charles. A simplified basic drawing of each bridge is being examined and data tabulated as to bridge openings, water depths and other water flow characteristics.
- d. The Soil Conservation Service of the U.S. Department of Agriculture is studying the tributaries for storage reservoir possibilities. The Corps of Engineers is studying storage potentials on the Charles River. Consideration is being given to many possibilities including storage for flood control, low-flow augmentation, fish and wildlife protection, recreation and water supply.
- e. Fish and Wildlife Resources of the Charles are briefly mentioned in a preliminary report of January 1967 by the U.S. Department of the Interior, Fish and Wildlife Service, with cooperation by the Commonwealth of Massachusetts, Department of Natural Resources, Fish and Game Division. The fish and wildlife biologist of the New England Division, Corps of Engineers is further examining and reporting by study sectors on the entire 80-mile length of the Charles River.

- f. Sources of pollution along the Charles and tributaries are being geographically located, and are being identified as to nature of effluent and agency sources, by the U.S. Department of the Interior, Federal Water Pollution Control Administration.
- g. Archaeologic aspects of the watershed are under survey contract through the U.S. National Park Service. A qualified associate of the Peabody Museum, Harvard University, is examining the watershed. Field work in the entire upper watershed (156 sq. mi. above South Natick dam) will be completed in 1967. Already 25 or 30 artifact sites in the Charles River farms area have been located, several of them damaged or nearly destroyed by urban and suburban development. Attention is being given to the State Route 109 relocation study corridor.
- h. Metropolitan Area Planning Council studies and other metropolitan and local urban planning data are being collected for the watershed by the Corps urban planner. An urban planning program for the watershed has been prepared.
- i. With Federal financial assistance, historic sites and historic structures in parts of the watershed are being examined by the Massachusetts Historical Commission. Examinations in fifteen watershed
 municipalities are scheduled to be completed in an early date.
- j. A federally-assisted report by the Commonwealth of Mas-sachusetts Metropolitan Area Planning Council on open spaces is awaited.

The report will discuss existing and proposed public and semi-public lands and recreation resources in the Charles River Watershed and in adjoining and surrounding municipalities. Tabulations of inventory data by individual towns are hoped for by autumn 1967.

k. An hydrological analysis was made of Muddy River and design criteria established.

l. Sonic soundings have been completed by Prof. Edgerton,
M.I.T., showing bottom elevations in Charles River Basin. Soundings
are presently being plotted to a scale that can be conveniently utilized
by the Corps of Engineers.

m. Present and future water and related land resources of Stony Brook Sub-Watershed (an area of 23.6 sq. mi.) in the towns of Waltham, Weston, Lincoln and Lexington are being investigated. Full use of computer programs and methods will be used in this study.

Schedule and progress of the study is shown on the attached bar chart. An Interim Report covering Lower Basin is scheduled
to be completed in November 1967 and the complete study and report in
F. Y. 1970.

